

AFCTN Test Report 94-127

AFCTB-ID 94-073



TMSS Parsing Test



MIL-M-87929A, Appendix E, System Peculiar Corrosion Control

Document Type Definition



MAXIMA Corporation

DISA Contract #DCA100-93-D-0065



Quick Short Test Report

20 June 1994

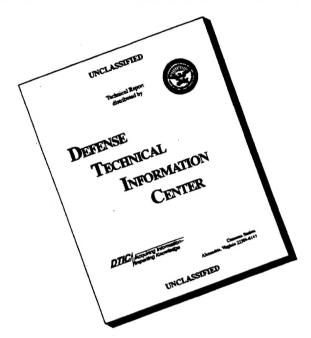


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MIL-M-87929A, Appendix E,
System Peculiar Corrosion Control
Document Type Definition
For:
MAXIMA Corporation
DISA Contract #DCA100-93-D-0065

Quick Short Test Report
20 June 1994

Prepared By Air Force CALS Test Bed Wright-Patterson AFB, OH 45433

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Air Force CALS Test Bed

Notification of Test Results

20 June 1994

This notice documents the results of an Air Force CALS Test Bed (AFCTB) Quick Short Test Report (QSTR) evaluation of data submitted by:

MAXIMA Corporation

Identified as follows:

Title:

MIL-M-87929A, Appendix E, System Peculiar Corrosion

Control, DTD Parsing Test

Program:

DISA

Program Office:

DISA

Contract No.:

DCA100-93-D-0065

OSTR No.:

AFCTB-ID 94-073

Received on the following media:

3.5" Diskette

The results of the QSTR evaluation are as follows:

MIL-STD-1840A Media Format:

N/A

MIL-D-28000A IGES:

N/A

MIL-M-28001B SGML:

Fail

MIL-R-28002A Raster:

N/A

MIL-D-28003 CGM:

N/A

Formal results with associated disclaimer are documented and available from the AFCTB.

Air Force CALS Test Bed HQ ESC/AV-2P 7 Colonel Glenn Highway, Suit

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FAX: 513-257-5881

Contents

1.	Intro	$ ext{duction}1$
	1.1.	Background1
	1.2.	Purpose2
2.	Test 1	Parameters3
3.	1840A	Analysis4
	3.1.	External Packaging4
4.	SGML A	Analysis4
	4.1.	Exoterica Validator5
	4.2.	Exoterica XGML Normalizer6
	4.3.	Public Domain sgmls7
	4.4.	Sema Mark-it8
5.	Concl	usions and Recommendations9
6.	Appen	dix A - Detailed SGML Analysis10
	6.1.	Exoterica Validator10
	6.2.	Exoterica XGMLNormalizer Parser15
	6.3.	Public Domain sgmls Log16
	6.4.	Sema Mark-it Log19
	6.5.	D929EA0.DTD21

1. Introduction

1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-cycle Support (CALS) Test Network (AFCTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1840A, and its companion suite of military specifications. The AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. pants take part voluntarily, benefit by receiving an evaluation of their latest implementation (interpretation) of the standards, interact with the AFCTN technical staff, gain experience using the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.

1.2 Purpose

The purpose of this informal test is to analyze Air Force Document Type Definitions (DTDs) for Standard Generalized Markup Language (SGML) syntax, using several commercial and public domain SGML parsers, prior to placing them in the Defense Information Systems Agency (DISA) Asset Source for Software Engineering Technology (ASSET) repository.

2. Test Parameters

Test Plan:

AFCTB 94-073

Date of

Evaluation:

20 June 1994

Evaluator:

George Elwood

Air Force CALS Test Bed

DET 2 HQ ESC/AV-2P 4027 Colonel Glenn Hwy

Suite 300

Dayton OH 45431-1672

Data

Originator:

Kay Hill

MAXIMA Corporation 2372 Lakeview Drive Beavercreek OH 45431

(513) 427-5888

Data

Description:

Technical Manual Test

1 DTD

Data

Source System:

Text/SGML

SOFTWARE

Unknown

Evaluation Tools Used:

MIL-M-28001 (SGML)

PC 486/50

Exoterica XGMLNormalizer v1.2e3.2 Exoterica Validator v2.2 ex1

McAfee & McAdam Sema Mark-it v2.3

Public Domain sgmls 1.1

Standards Tested:

MIL-M-28001B

3. 1840A Analysis

3.1 External Packaging

The 3.5" diskette was hand delivered to the Air Force CALS Test Bed (AFCTB). It was not enclosed in any type of container.

The files received by the AFCTB were not MIL-STD-1840A. They were not named per the standard conventions, as the stated purpose of the evaluation was the basic data structure.

4. SGML Analysis

The AFCTB has several parsers available for evaluating submitted DTD and text files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. These products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings unless specified in the report.

The goal was to configure the DTD under analysis as it would normally be used. However, for this analysis it was necessary to modify the DTD adding the "DOCTYPE doc [" statement to the start and the companion "]>" to the end of the DTD under evaluation, as stated in the comments of the DTD. If the parser did not support a formal file pointing to the location of the ISO character sets, this was added.

The DTD under evaluation, MIL-M-87929A, Appendix E, System Peculiar Corrosion Control, called a sequence of companion DTDs, each in turn, as illustrated by the diagram below. These DTDs were delivered on the same diskette as the DTD to be evaluated. The DTDs were not changed except to point to the succeeding DTD in the sequence and to insert the location of the ISO character set files in the D784CBO.A3 DTD.

<!-- MIL-M-87929A System Peculiar Corrosion Control DTD -->

D929EAO.ORG --> D929AAO.ORG ---> D807BAO.A1

-> D784CB0.A3

The following notes apply to the parsing analysis as indicated in the ensuing paragraphs.

- Note 1. Entity parameters defined more than once is a vaild SGML construct. The duplicate definition errors and/or warnings in this analysis do not indicate any problems.
- Note 2. The occurrences of warnings "references defined, but not used," appeared because portions of the called DTD, i.e., MIL-M38784C, were not used. They were not used because the entity definitions of the DTD under analysis altered the execution path in the called DTD. The warnings in this analysis do not indicate any problems.

4.1 Exoterica Validator

The DTD file was evaluated using the Exoterica Validator exl parser. The basic DTD was modified by placing the concrete syntax file and "<!DOCTYPE doc [" at the start and the "]>" at the end. No errors were reported by the parser. The TOTAL CAPACITY was increased to 250000 for this set of DTDs after receiving messages about exceeding capacities.

The parser reported 57 total warnings of three types. The first type warning was a parameter entity declared more than once. See Note 1 above.

<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 31, used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205, used in "\xgml\9473.dtd", line 102:

A parameter entity name has been declared more than once. The entity is "%frnt".

<!ENTITY % frnt "(idinfo, lep, verstat?, contents)" >

-->

The second type warning related to elements defined but not used in any content model. See Note 2 above.

<!-- **Warning** in "\xgml\9473.dtd", line 230:
An element is not allowed in the document instance because it does not appear in any accessible content model or it is completely excluded.
The element is "APPENDIX".

The third type warning was an element used but not defined. This warning indicates an error in the DTD syntax.

<!-- **Warning** in "\xgml\9473.dtd", line 230:
An element name specified in a USEMAP declaration, ATTLIST declaration or content model is not defined by an ELEMENT declaration.
The element name is "UNIT".

4.2 Exoterica XGML Normalizer

The DTD file was parsed using the Exoterica XGMLNormalizer parser. The concrete syntax and "<!DOCTYPE doc [" were added to the start and "]>" to the end of the file. One warning was issued by this utility for an element used but not defined. This warning indicates and error in the DTD syntax.

C:\XGML\XGMLNORM.EXE -Warning on line 165 in file 9473.dtd:
An undeclared element name was used in a content model.
The element is 'UNIT'.

Also reported was a TOTCAP exceeded warning. The TOTCAP was reset to 250000 for the DTD.

4.3 Public Domain sgmls

The DTD file was evaluated using the Public Domain sgmls parser version 1.1. The file was modified by adding the "<!DOCTYPE doc [" to the start and "]>" to the end of the file as stated in the comments in the DTD. The D929AAO. ORG, D807BAO.A1 and D784CBO.A3 files were used as the point to files. One error was reported by the parser. The error was a TOTCAP exceeded. It was reported as 249073.

sgmls: SGML error:

Capacity limit TOTALCAP exceeded by 49073 points

Twenty-two total warnings of two types were reported by the parser. The first type warning was for a duplicate definition.

See Note 1 above.

sgmls: In file included at \ws\9473.dtd, line 30:
In file included at c:\ws\929a.dtd, line 205:
Warning at c:\ws\807b.dtd, line 31 in declaration parameter 4:
Duplicate specification occurred for "%frnt"; duplicate ignored

The second type warning related to an element used but not defined. This warning indicates an error in the DTD syntax.

sgmls: Warning at \ws\9473.dtd, line 158 at record end: Element "UNIT" used in DTD but not defined

4.4 Sema Mark-it

The DTD file was evaluated using McAfee & McAdam's Sema Mark-it v2.3 parser. The file was modified by adding the concrete syntax and "<!DOCTYPE doc [" to the start and "]>" to the end of the file. The parser reported errors that did not appear to be consistent with the rest of the parsers. The files used were the exact files parsed by the Exoterica parsers.

It was noted that the parser got lost and stopped. Shown below is the error message and the part of the DTD it relates to. From the capacities it appears that the entire DTD and subset were not parsed.

```
<!--*** file:\xgml\9473.dtd line:109 pos:3305
Unknown parameter entity name (wp) used in reference.
If name is spelt correctly check that the entity declaration in the DTD contains a PERO (e.g. %) symbol followed by a space.-->
```

5. Conclusions and Recommendations

The file D929EAO.ORG, MIL-M-87929A, Appendix E, System Peculiar Corrosion Control, does not conforms to the SGML syntax of ISO Standard 8879, as required by the CALS MIL-M-28001B specification. This conclusion is derived from the parser test warnings which indicate elements are used that are not defined.

6. Appendix A - Detailed SGML Analysis

6.1 Exoterica Validator

```
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 31,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%frnt".
   <!ENTITY % frnt "(idinfo, lep, verstat?, contents)" >
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 45,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%yesorno".
   <!ENTITY % yesorno "NUMBER" >
<!-- **Warning** in "c:\ws\807b.dtd" (entity "%m38807b"), line 88,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%ipbforwd".
   <!ENTITY % ipbforwd "(modelcover, serialization?, finding?, simassem?,
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 18,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%math".
   <!ENTITY % math "IGNORE" >
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 33,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%mathtxt".
   <!ENTITY % mathtxt " " >
-->
```

-->

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 37,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xqml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%shortitleuse".
   <!ENTITY % shortitleuse "IGNORE" >
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 45,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%shortitle".
   <!ENTITY % shortitle " " >
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 47,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%yesorno".
   <!ENTITY % yesorno "NUMBER" >
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 50,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%itemid".
   <!ENTITY % itemid
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 62,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%content".
   <!ENTITY % content
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 71,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%bodyatt".
   <!ENTITY % bodyatt
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 82,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xqml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%list".
   <!ENTITY % list "(seqlist | randlist | deflist)" >
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 86,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%spcpara".
   <!ENTITY % spcpara "(warning?, caution?, note?)" >
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 107,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%frnt".
   <!ENTITY % frnt "(idinfo, warnpage?, chginssht?, lep, verstat?,
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 117,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%fpi".
   <!ENTITY % fpi "(para0, (para0 | %list; | symsect | abbrsect |
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 126,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%titles".
   <!ENTITY % titles "title %shortitle;" >
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 133,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%fig".
    <!ENTITY % fig "(%titles;, (subfig+ | (graphic | macrograph |
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 165,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%bodyele".
   <!ENTITY % bodyele "(chapter, chapter+, ddchapter?)" >
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 190,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%graphatt".
   <!ENTITY % graphatt
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 228,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%entryatt".
   <!ENTITY % entryatt
-->
```

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 248,
     used in "c:\ws\807b.dtd" (entity "%m38807b"), line 103,
     used in "c:\ws\929a.dtd" (entity "%m87929a"), line 205,
     used in "\xgml\9473.dtd", line 102:
   A parameter entity name has been declared more than once.
   The entity is "%lrp".
   <!ENTITY % lrp "(tmidno, title)+" >
-->
<!-- **Warning** in "\xgml\9473.dtd", line 230:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "APPENDIX".
-->
                           <><< PART OF LOG FILE REMOVED HERE >>>>
   The element is "BODY".
   The element is "CHAPTER".
   The element is "CHGINSSHT".
   The element is "CHGLIST".
   The element is "CHGREC".
   The element is "DATE".
   The element is "DATEINC".
   The element is "DDCHAPTER".
   The element is "DDDESC".
   The element is "DDINDEX".
   The element is "DDINTRO".
   The element is "DDLIST".
   The element is "DOC".
   The element is "DOCIPB".
   The element is "DOCPART".
   The element is "DOCWP".
   The element is "ECPNO".
   The element is "FOREWORD".
   The element is "GLOSSARY".
   The element is "INDEX".
   The element is "INSERTPG".
   The element is "INTRO".
   The element is "PENAPP".
   The element is "PGNO".
   The element is "PREFACE".
   The element is "RATD".
   The element is "REAR".
   The element is "REINTEST".
   The element is "REMOVEPG".
   The element is "REPTEST".
   The element is "SECTION".
```

```
The element is "SHORTTITLE".

The element is "TYPENO".

-->

<!-- **Warning** in "\xgml\9473.dtd", line 230:

An element name specified in a USEMAP declaration, ATTLIST declaration or content model is not defined by an ELEMENT declaration.

The element name is "UNIT".

-->

The element is "VOLUME".

The element is "WARNPAGE".

The element is "WP".
```

6.2 Exoterica XGMLNormalizer Parser

C:\XGML\XGMLNORM.EXE --Warning on line 230 in file 9473.dtd: An undeclared element name was used in a content model. The element is 'UNIT'.

6.3 Public Domain sgmls Log

```
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
      Warning at c:\ws\807b.dtd, line 31 in declaration parameter 4:
       Duplicate specification occurred for "%frnt"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
      Warning at c:\ws\807b.dtd, line 45 in declaration parameter 4:
      Duplicate specification occurred for "%yesorno"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
      Warning at c:\ws\807b.dtd, line 90 in declaration parameter 4:
      Duplicate specification occurred for "%ipbforwd"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
      Warning at i:\dtd\784c.dtd, line 18 in declaration parameter 4:
      Duplicate specification occurred for "%math"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
      In file included at c:\ws\929a.dtd, line 205:
      In file included at c:\ws\807b.dtd, line 103:
      Warning at i:\dtd\784c.dtd, line 33 in declaration parameter 4:
      Duplicate specification occurred for "%mathtxt"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
      In file included at c:\ws\807b.dtd, line 103:
      Warning at i:\dtd\784c.dtd, line 37 in declaration parameter 4:
      Duplicate specification occurred for "%shortitleuse"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
      Warning at i:\dtd\784c.dtd, line 45 in declaration parameter 4:
      Duplicate specification occurred for "%shortitle"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
      Warning at i:\dtd\784c.dtd, line 47 in declaration parameter 4:
      Duplicate specification occurred for "%yesorno"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
      In file included at c:\ws\807b.dtd, line 103:
      Warning at i:\dtd\784c.dtd, line 60 in declaration parameter 4:
      Duplicate specification occurred for "%itemid"; duplicate ignored
```

```
sqmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 69 in declaration parameter 4:
       Duplicate specification occurred for "%content"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 80 in declaration parameter 4:
       Duplicate specification occurred for "%bodyatt"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 82 in declaration parameter 4:
       Duplicate specification occurred for "%list"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 86 in declaration parameter 4:
       Duplicate specification occurred for "%spcpara"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 109 in declaration parameter 4:
       Duplicate specification occurred for "%frnt"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 118 in declaration parameter 4:
       Duplicate specification occurred for "%fpi"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
      Warning at i:\dtd\784c.dtd, line 126 in declaration parameter 4:
       Duplicate specification occurred for "%titles"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 134 in declaration parameter 4:
       Duplicate specification occurred for "%fig"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 165 in declaration parameter 4:
       Duplicate specification occurred for "%bodyele"; duplicate ignored
```

```
sqmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 204 in declaration parameter 4:
       Duplicate specification occurred for "%graphatt"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 238 in declaration parameter 4:
       Duplicate specification occurred for "%entryatt"; duplicate ignored
sgmls: In file included at \ws\9473.dtd, line 30:
       In file included at c:\ws\929a.dtd, line 205:
       In file included at c:\ws\807b.dtd, line 103:
       Warning at i:\dtd\784c.dtd, line 248 in declaration parameter 4:
       Duplicate specification occurred for "%lrp"; duplicate ignored
sgmls: Warning at \ws\9473.dtd, line 158 at record end:
       Element "UNIT" used in DTD but not defined
sqmls: SGML error:
       Capacity limit TOTALCAP exceeded by 49073 points
```

TOTALCAP 249073 **ENTCAP 13536** ENTCHCAP 17033 ELEMCAP 9504 **GRPCAP 77056** EXGRPCAP 1952 EXNMCAP 5216 **ATTCAP 87648** ATTCHCAP 2085 AVGRPCAP 34784 NOTCAP 96 NOTCHCAP 163 IDCAP 0 IDREFCAP 0 MAPCAP 0 LKSETCAP 0 LKNMCAP 0

6.4 Sema Mark-it Log

```
<!--*** file:\xgml\9473.dtd line:109 pos:3305
Unknown parameter entity name (wp) used in reference.
If name is spelt correctly check that the entity declaration in the DTD
contains a PERO (e.g. %) symbol followed by a space .-->
<!--*** file:\xqml\9473.dtd line:109 pos:3308
Syntax error. Valid tokens at this point are: Ee s pero dtgo name grpo rniPCDATA .-->
<!--*** file:\xqml\9473.dtd line:110 pos:3377
Syntax error. Valid tokens at this point are: Ee s mdo mdc mdo com pio mdo dso pero ms
dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF mdoATTLIST mdoUSEMAP .-->
<!--*** file:\xgml\9473.dtd line:110 pos:3386
Syntax error. Valid tokens at this point are: Ee s mdo mdc mdo com pio mdo dso pero ms
dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF mdoATTLIST mdoUSEMAP .-->
<!--*** file:\xgml\9473.dtd line:110 pos:3405
Syntax error. Valid tokens at this point are: Ee s mdo mdc mdo com pio mdo dso pero ms
dsc mdoNOTATION mdoENTITY mdoELEMENT mdoSHORTREF mdoATTLIST mdoUSEMAP .-->
<!--*** file:\xgml\9473.dtd line:112 pos:3483
Illegal end of entity within a delimited text (e.g. a declaration).
ISO 8879 prohibits declarations that start in one entity and end in another .-->
ATTCNT --100-- 47
ATTSPLEN --960-- 0
BSEQLEN --960-- 0
DTAGLEN --16-- 0
DTEMPLEN --16-- 0
ENTLVL --16-- 3
GRPCNT --32-- 22
GRPGTCNT --96-- 27
GRPLVL --16-- 5
LITLEN --3048-- 730
NAMELEN --32-- 13
NORMSEP --2-- 0
PILEN --240-- 0
TAGLEN --960-- 0
TAGLVL --24-- 0
MSDLVL --24-- 1
TOTALCAP --270000-- 154223
ENTCAP --200000-- 16224
ENTCHCAP --70000-- 11575
ELEMCAP --70000-- 5984
GRPCAP --100000-- 42336
```

EXGRPCAP --70000-- 832

EXNMCAP --70000-- 1344

ATTCAP --200000-- 53568

ATTCHCAP --70000-- 1304

AVGRPCAP --70000-- 20800

NOTCAP --70000-- 96

NOTCHCAP --70000-- 160

IDCAP --70000-- 0

IDREFCAP --70000-- 0

LKSETCAP --70000-- 0

LKNMCAP --70000-- 0

6.5 D929EA0.DTD

```
<!-- ********************** START OF FILE ******************************
<!-- SUPPLEMENT NOTICE: This file is made available to provide the user with
a digital representation of the DTD found in Appendix E of MIL-M-87929A.
This file is incomplete without MIL-M-87929A. -->
<!-- NOTE: The start and end of this file are marked with a row of asterisks.
If these rows are not present the file may not be complete! -->
<!-- MIL-M-87929A System Peculiar Corrosion Control DTD -->
<!-- The following set of declarations may be referred to by using a
public entity as follows:
<!ENTITY % m87929spc PUBLIC "-//USA-DOD//DTD MIL-M-87929A SPCC//EN" >
%m87929spc;
-->
<!-- NOTE: In order to parse the following DTD subset alone, append
the following statement to the beginning of the file:
     <!DOCTYPE docspcc [
and the associated "]>" to the end of the file. -->
<!ENTITY % m87929a PUBLIC "-//USA-DOD//DTD MIL-M-87929A//EN" >
%m87929a;
<!-- ELEMENT and ATTRIBUTE LIST DECLARATIONS -->
                     - o (para+) >
<!ELEMENT appear
<!ATTLIST appear
                     %secur; >
<!ELEMENT cleaningwp
                         -- (%wp;, wpforewd, safesum?, techinfo, swp*)
                              +(figure | table | foldout) >
                         chgno NUMBER "O"
<!ATTLIST cleaningwp
                         %bodyatt;
                         %secur; >
<!ELEMENT colorname
                        - o (%text;) >
<!ATTLIST colorname
                        %secur; >
<!ELEMENT colornum
                       - o (%text;) >
<!ATTLIST colornum
                       %secur; >
```

```
<!ELEMENT corremrep
                     -- (para0, (indexno, nomen, damlimit, repproc)+)
                            +(ftnote | warning | caution | note) >
<!ATTLIST corremrep
                       %bodyatt;
                       %secur; >
                      -- (para0, (indexno, nomen, material, appear,
<!ELEMENT corrinsp
                           prefinsp, cause)+) +(ftnote | warning |
                           caution | note) >
<!ATTLIST corrinsp
                      %bodyatt;
                      %secur; >
<!ELEMENT corrosionwp
                       -- (%wp;, wpforewd, safesum?, techinfo,
                              ((corrinsp, corremrep, sealrep, finsys,
                              markill) | corrswp*)) +(figure | table |
                              foldout) >
<!ATTLIST corrosionwp
                         chgno NUMBER "0"
                         %bodyatt;
                         %secur; >
<!ELEMENT corrswp
                     -- (%wp;, wpforewd, safesum?, techinfo, corrinsp,
                          corremrep, sealrep, finsys, markill) +(figure
                          table | foldout) >
                     chqno NUMBER "O"
<!ATTLIST corrswp
                     %bodyatt;
                     %secur; >
<!ELEMENT damlimit
                    - o (%text;) >
<!ATTLIST damlimit
                     %secur: >
<!ELEMENT docspcc
                     -- (front, aiwp, forewordwp, sttecwp, cleaningwp,
                         paintwp, sealingwp, specwp*, corrosionwp*,
                          ipbwp?, ddwp?, foldsect?) +(pgbrk | brk) >
<!ATTLIST docspcc
                     service %service; 'AF'
                     %docatt:
                     %secur; >
<!ELEMENT finsys
                    -- (para0, (indexno, nomen, metalid, origpretreat,
                         colorname, colornum, pretreat, primer,
                         topcoat)+) +(ftnote | warning | caution |
                         note) >
<!ATTLIST finsys
                    %bodyatt;
                    %secur; >
<!ELEMENT indexno
                    - o (%text;) >
<!ATTLIST indexno
                     %secur; >
<!ELEMENT location
                     - o (%text;) >
<!ATTLIST location %secur; >
```

. . . .

```
-- ((marklegend, marksize, colorname, colornum,
<!ELEMENT markill
                          location)+) +(ftnote | warning | caution |
                          note) >
<!ATTLIST markill
                     %bodyatt;
                     %secur; >
<!ELEMENT marklegend
                      - o (%text;) >
<!ATTLIST marklegend
                      %secur; >
<!ELEMENT marksize
                      - o (%text;) >
<!ATTLIST marksize
                      %secur; >
<!ELEMENT material
                      - o (%text;) >
<!ATTLIST material
                     %secur; >
<!ELEMENT metalid
                     - o (%text;) >
<!ATTLIST metalid
                    %secur; >
<!ELEMENT origpretreat
                        - o (%text;) >
<!ATTLIST origpretreat
                        %secur; >
                     -- (%wp;, wpforewd, safesum?, techinfo, swp*)
<!ELEMENT paintwp
                          +(figure | table | foldout) >
                     chgno NUMBER "O"
<!ATTLIST paintwp
                     %bodyatt;
                     %secur; >
<!ELEMENT prefinsp
                    - o (%text;) >
<!ATTLIST prefinsp
                     %secur; >
<!ELEMENT pretreat
                     - o (%text;) >
<!ATTLIST pretreat
                    %secur; >
<!ELEMENT primer
                    - o (%text;) >
<!ATTLIST primer
                    %secur; >
<!ELEMENT repproc
                     - o (%text;) >
<!ATTLIST repproc
                     %secur; >
<!ELEMENT sealingwp
                       -- (%wp;, wpforewd, safesum?, techinfo, swp*)
                            +(figure | table | foldout) >
                       chano NUMBER "0"
<!ATTLIST sealingwp
                       %bodyatt;
                       %secur; >
                     -- (para0, (indexno, nomen, repproc)+) +(ftnote
<!ELEMENT sealrep
                          | warning | caution | note) >
```